

Mission Manager – GS-14 - UNOFFICIAL

Introduction

The Mission Manager responsibility is to provide management and guidance for the mission in definition, organization, direction, and emphasis throughout the lifetime of the mission.

Major Duties

As a Mission Manager, the incumbent has been delegated the overall responsibility for the management and leadership of a designated mission's activities.

Mission Planning and Evaluation

1. The Mission Manager maintains continuous surveillance of schedule milestones for all Mission systems and all activities within or outside NASA which may affect the programmed costs, technical reliability, and completion date of the particular mission.
2. Establishes overall policies and priorities. Provides management and guidance for the mission in program definition, organization, direction, and emphasis throughout the lifetime of the program.

Systems Engineering, Systems Integration, Test and Evaluation

1. The incumbent assists in the maintenance of the Mission's systems engineering to ensure a maximum probability that the several systems will satisfactorily perform their part of the mission assignment, and resolves all activities within or outside NASA which may affect the programmed cost, technical reliability and completion date of the particular Mission.
2. Incumbent must recognize the unique management and technical problems that arise in the development of complex systems and devise and execute effective solutions to these problems.
3. Performs reviews of test and evaluation specifications and test results and initiates appropriate corrective action where necessary to improve the reliability of the mission.
4. Serves as technical liaison with other GSFC elements to ensure cooperative and effective technical interfaces.

Technical Consultation and Advice

1. Requests special technical information from the appropriate areas of NASA as required.
2. Establishes, convenes and chairs committees and working groups as deemed necessary during the life of the mission such as coordination committees, supporting design review groups and failure analysis groups.

3. Submits initial budget recommendations for mission activities or any of its systems and/or subsystems as part of the annual NASA budget preparation and makes revisions on case-by-case basis as may be required. Develops and recommends financial operating plans for the systems assigned to the GSFC.
4. Directs all contractor efforts for the mission. Ensures that GSFC or other NASA activities maintain appropriate technical monitoring over the quality, timing, and work placed with outside contractors or other government agencies. Provides close liaison with, and assistance to, procurement officials in their negotiations and administration of contracts for the Mission.
5. Develops and initiates reports as may be required by NASA or by Program circumstances to keep personnel and higher authorities informed of the progress. Ensures that the data resulting from mission activities are disseminated in accordance with the Mission Plan.
6. The incumbent is responsible to his/her supervisor for assuring that the work assignments of other employees of the group are carried out by performing a range of duties such as:
 - Distributing and balancing the workload among employees in accordance with established work flow or job specialization, and assuring timely accomplishment of work;
 - Instructing employees in specific tasks and job techniques and making available written instructions, reference materials, and supplies;
 - Giving on-the-job training to new employees in accordance with established procedures and practices;
 - Maintaining current knowledge and answering questions of other employees on procedures, policies, directives, etc., and obtaining needed information or decisions from supervisor on problems that come up;
 - Checking on work in progress, spot checking, and reviewing completed work to see that supervisor's instructions on work sequence, methods, procedures, and deadlines have been met;
 - Amending or rejecting work not meeting established standards, referring unusual situations to supervisor;
 - Reporting to supervisor on performance, progress, and training needs of employees; and
 - At supervisor's request, making recommendations pertaining to promotion, reassignment, recognition, and personnel needs.

Performs required travel.

Performs other duties as assigned.

FACTOR 1 - Skills and Knowledge Required by the Position

1. A Bachelor's degree or higher in an appropriate field of engineering, physical science or mathematics.

2. Professional knowledge of and ability to apply engineering disciplines of space flight technology in development and operation of spacecraft and instrument systems including subsystems such as thermal, structural, power, communications, data handling, control and guidance.
3. Knowledge of and experience in all phases of project management including but not limited to project-wide planning and evaluation, systems safety, systems tests, configuration management, systems integration tests, reliability and quality assurance, spacecraft compatibility with launch vehicles, integrity to meet mission requirements, scheduling, health and safety, budgetary and financial planning, technical direction and monitoring of contracts, and project reporting.
4. Ability to manage the various elements and groups required to effect a complete spacecraft project, including the ability to direct the efforts of professional employees.
5. Knowledge of government and agency contractual and funding rules, regulations, relationships, and administrative processes involved in developing and procuring hardware, research studies, and engineering services.
6. Ability to communicate orally and in writing.
7. Ability to plan and organize a variety of project management activities.

FACTOR 2 - Supervisory Controls

Reports administratively to the Project Manager. Work is assigned through program discussions with the Project Manager, who provides administrative direction in terms of broadly defined mission objectives, budgetary allocations and general schedules.

The incumbent is responsible for planning and directing the work of the mission contractor, any support contractors, and any GSFC engineering independent of specific instructions. This includes cost and schedule responsibility, establishing priorities, evaluating schedule responsibility, establishing priorities, evaluating changes, trading costs and risks, and negotiating changes.

Results of the work are normally considered technically and managerially authoritative and are normally accepted without change. The work is, in a general sense, reviewed to assure achievement of mission objectives and compliance with NASA policies.

FACTOR 3 – Guidelines

Guidelines are broadly stated and nonspecific; e.g., broad policy statements and program directives which require extensive interpretation. Incumbent is responsible for developing project plans, submitting budget recommendations, maintaining schedules, preparation of systems and subsystems specifications.

The incumbent is the senior line official responsible for execution of the mission management within NASA Headquarters and Center prescribed guidelines and control. Must use considerable judgment and ingenuity in interpreting the intent of guides which do exist, developing recommendations to higher levels of management, and interpreting and implementing application of board objectives for technical and administrative aspects of the Mission.

FACTOR 4 – Complexity

As Mission Manager for a major NASA endeavor, the incumbent will organize, lead, direct, and control all elements of project management, project planning, implementation, instrument selection to launch and post-launch activities.

The work consists of broad functions and processes including all aspects of project management both technical and administrative. Technical and administrative issues are largely undefined and require project management decisions based on studies, analyses, evaluation of technological/program changes, advancements, and budget.

Problems encountered by the incumbent encompass the full range of project management responsibilities--technical, scientific, and administrative.

FACTOR 5 - Scope and Effect

The purpose of this position is to provide overall leadership and an authoritative source of management and technical expertise in planning, developing and implementing the Mission system. In preparation of development plans, incumbent establishes parameters to be investigated and coordinates multiple resources, scientific and engineering efforts during the design, development, and implementation phases of the effort. The incumbent continually reviews and evaluates the systems under development for compatibility and provides solutions or proposes new approaches for resolution of problem areas.

FACTOR 6 - Personal Contacts

The extensive scope of project management necessitates direct contacts with key officials, top engineers, and scientific personnel of NASA, other U.S. government agencies, foreign government agencies, universities, and private contractors.

FACTOR 7 - Purpose of Contacts

The purpose is to justify, negotiate, and settle matters involving significant or controversial technical, scientific, and administrative issues. It involves active participation in conferences and meetings to discuss issues of importance to the mission, the Project, the MTPE, and GSFC. These issues are usually varying and controversial requiring the Mission Manager to achieve satisfactory results with no impact to the objectives of the program.

FACTOR 8 - Physical Demands

The work is normally performed in a typical office setting. The incumbent will be expected to attend meetings where he/she must be attentive and sit for long periods of time. He/she will also be involved with integration and test, pre-launch and launch activities that may require working in a controlled environment, wearing special clothing, stooping, bending, and in some instances climbing.

FACTOR 9 - Work Environment

The incumbent primarily works in a typical office setting (meeting rooms, conference rooms, etc.). Travel by air and auto is an element of this position.